

Claims:

(1) In the reaction of catalytic gas phase oxidation induced by the supply of at least a raw material to be oxidized and a molecular oxygen-containing gas to a reactor for the

5 reaction of catalytic gas phase oxidation, a method for starting up the reactor characterized by causing said raw material and said molecular oxygen-containing gas to pass a range in which the concentration of said raw material is less than the concentration of the lower explosion limit of
10 said raw material and the concentration of oxygen is not less than the limiting oxygen concentration, but excluding the concentration of said raw material of 0 vol. %.

(2) A method according to claim 1, wherein the process of production including a step of absorption subsequently to the step for the reaction of catalytic gas phase oxidation requires the discharged gas emanating from said step of absorption to be supplied to said reactor in combination with said raw material and said molecular oxygen-containing gas.

(3) A method according to claim 1, wherein said raw material is propane, propylene, acrolein, isobutylene and/or methacrolein.

(4) In a process of production including a step for the reaction of catalytic gas phase oxidation induced by supplying at least a raw material to be oxidized and a molecular oxygen-containing gas to a reactor for catalytic gas phase oxidation and a step of absorption, a method for preparing said feed raw material, characterized by supplying the discharged gas obtained at said step of absorption to said reactor thereby causing the concentration of said raw material and the concentration of oxygen to fall in a range in which the concentration of said raw material is less than the concentration of the lower explosion limit of said raw material

and the concentration of oxygen is not less than the limiting oxygen concentration, but excluding the concentration of said raw material of 0 vol. %.

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